WEST

End of Result Set

Generate Collection | Print

L5: Entry 6 of 6 File: USPT Jun 24, 1997

US-PAT-NO: 5641870
DOCUMENT-IDENTIFIER: US 5641870 A

TITLE: Low pH hydrophobic interaction chromatography for antibody purification

DATE-ISSUED: June 24, 1997

INVENTOR-INFORMATION:

NAME	CITY	STATE	ZIP CODE	COUNTRY
Rinderknecht; Ernst H.	San Carlos	CA		
Zapata; Gerardo A.	Foster City	CA		

US-CL-CURRENT: 530/417; 435/252.3, 435/252.33, 435/803, 530/390.5, 530/413

CLAIMS:

We claim:

1. A process for purifying an antibody comprising loading a mixture containing the antibody on a hydrophobic interaction chromatography column and eluting the antibody from the column with a buffer having a pH of about 2.5 to about 4.5.

2. The process of claim 1 wherein the mixture loaded onto the column is at a pH of about 2.5 to about 4.5.

3. The process of claim 1 wherein the mixture loaded onto the column has a salt concentration of about 0M to about 0.25M.

4. The process of claim 3 wherein the mixture loaded onto the column has a salt concentration of about 0M to about 0.1M.

5. The process of claim 1 wherein the buffer has a salt concentration of about 0M to about 0.25M.

6. The process of claim 5 wherein the buffer has a salt concentration of to about 0M about 0.1M.

7. The process of claim 1 wherein the antibody comprises nonhuman complementarity determining region (CDR) residues and human Immunoglobulin residues.

8. The process of claim 7 wherein the antibody comprises nonhuman CDR residues and human framework region (FR) residues.

9. The process of claim 1 wherein the antibody is an antibody fragment which comprises an antigen binding region.

10. The process of claim 9 wherein the antibody fragment comprises a F(ab').sub.2 fragment.

11. The process of claim 1 wherein the buffer has a pH of about 2.8 to about 3.5.

12. The process of claim 11 wherein the buffer has a pH of about 3.1.

13. The process of claim 1 wherein the hydrophobic interaction chromatography column is a phenyl agarose column.

14. The process of claim 1 wherein the antibody eluted from the column is a correctly disulfide linked antibody.

15. The process of claim 14 wherein the mixture loaded onto the column further contains an incorrectly disulfide linked antibody and the correctly disulfide linked antibody is purified therefrom.

16. The process of claim 15 wherein the incorrectly disulfide linked antibody is an antibody fragment which comprises an antigen binding region .